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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,710	04/19/2000	Dimitar P. Filev	199-0287	3156

7590 02/25/2003

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EXAMINER
BARNES, CRYSTAL J

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No. 09/552,710	Applicant(s) FILEV ET AL.	
	Examin r Crystal J. Barnes	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The specification, as amended in Amendment A, overcomes the objection.

Response to Arguments

2. The Office Action (paper no. 6) mailed 25 September 2002 is herein incorporated by reference.

3. Claims 1, 4, 5, 8 and 10-12 remain rejected under 35 USC 103(a) as being unpatentable over USPN 6,226,568 to Tong et al. ✓

4. Claims 1-3, 8, and 9 remain rejected under 35 USC 103(a) as being unpatentable over USPN 6,146,264 to Tong et al. ✓

5. Claims 6 and 7 remain rejected under 35 USC 103(a) as being unpatentable over USPN 6,146,264 to Tong et al. as applied to claims 1-3, 8, and 9 above, and further in view of USPN 5,341,988 to Rein et al.

6. Claim 1 remains rejected under 35 USC 103(a) as being unpatentable over USPN 5,643,077 to Ayer.

7. Applicant's arguments filed 2003 February 3 have been fully considered but they are not persuasive.

The Tong et al. reference (USPN 6,226,568) discloses a computer controlled balancing system. Low airflow sensors 52 may be used to provide accuracy in signaling airflow direction and air flow velocity. Digital output of the sensors is sent to a microprocessor 53 that in turn converts the information for use by a programmable logic controller that adjusts the cross-flow dampers and venturi gap width. An operator interface with the controller can be attained through use of a desktop terminal personal computer 55 or through a remote terminal unit. (See columns 4-5 lines 61-5).

The Tong et al. reference (USPN 6,146,264) discloses signals generated by the velocity measurement sensors are applied to control motors used on air supply fans and dampers that determine the down flow velocity values in the contiguous chambers (see column 1 lines 59-65). An airflow control algorithm, containing target values for down flow and cross flow, provide a base against which the

sensed velocity values are compared, so as to provide a desired air flow balance (see column 2 lines 1-4).

The Ayer reference (USPN 5,643,077) discloses a ventilation system, on a spray booth or paint stripping enclosure, in which variable speed fans are employed and controller by a sensor so that the flow rate exhausted from the booth is continually adjusted to minimize the exhaust flow rate from the enclosure (see Abstract).

Neither of the Tong et al. references or the Ayer reference expressly discloses a portable airflow sensor and a portable computer.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to make the sensor and/or the computer taught by the Tong et al. and Ayer references portable. It is not invention merely to make old device portable or movable without producing any new and unexpected result. (See *In re Lindberg*, 93 USPQ 23.)

One of ordinary skill in the art would have been motivated to make the sensor and/or the computer portable so that it could be carried and moved with ease to other systems requiring airflow balancing.

The Rein et al. reference (USPN 5,341,988) discloses a wireless communication system between air distribution controllers and the zone temperature sensors in the zone to be controlled (see column 1 lines 8-12). A hierarchical control system also includes a sensor for sensing conditions, a second communication medium, and a transmitter for transmitting the sensed conditions from the sensor to the central receiver via the second communication medium (see Abstract).

The Rein et al. reference does not expressly disclose a portable airflow sensor and a portable computer.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the desktop terminal taught by the Tong et al. references with the operator interface taught by the Rein et al. reference.

One of ordinary skill in the art would have been motivated to modify the method of balancing paint booth airflows utilizing a wireless communications system.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 703.306.5448. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 703.305.8498. The fax phone numbers for the organization where this application or proceeding is assigned are 703.746.7239 for regular communications and 703.746.7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

cjb
February 19, 2003

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100